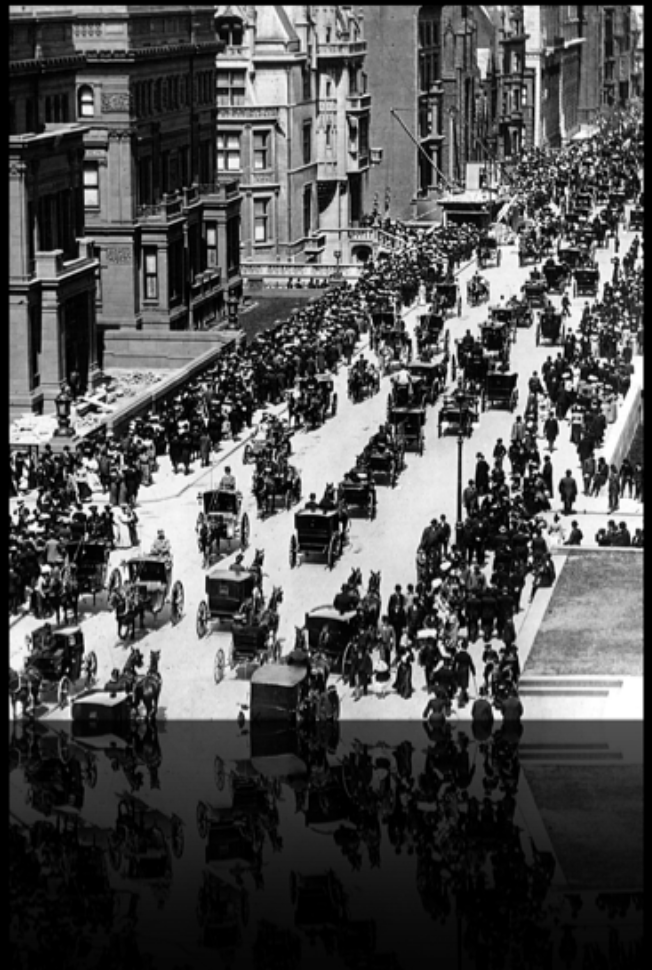
SMART COLUMBUS

SMART COLUMBUS OVERVIEW

WE’VE BEEN
HERE BEFORE.
SM
RT
COLUMBUS

PHOTOGRAPH OF EXHIBIT OF COLUMBUS BUGGY COMPANY, TRANSPORTATION BUILDING, WORLD'S FAIR.

BUGGY MANUFACTURING CAPITAL



SMRT COLUMBUS

OUR OPPORTUNITY
TO TRANSFORM.
YEARS IN
THE MAKING.
SM
RT
COLUMBUS

78 MID-SIZE CITIES RESPONDED TO THE US DEPARTMENT OF TRANSPORTATION'S SMART CITY CHALLENGE

7 WORLD CLASS FINALISTS

COLUMBUS
AUSTIN
DENVER
PORTLAND
PITTSBURGH
KANSAS CITY
SAN FRANCISCO

COLUMBUS WON THE MANDATE TO BECOME THE MODEL

SMRT COLUMBUS

WE WON
$50 MILLION

$40 M $10 M

TO BECOME THE
TEST CITY FOR SMART CITIES

BY DEPLOYING A
COMPREHENSIVE TECHNOLOGY PLAN THAT PUTS PEOPLE FIRST

AND WE'LL DO IT
THE COLUMBUS WAY

$90M JUNE 2016 → **$500M** TODAY → **$1B** 2020

VISION STATEMENT

Our goal for the future

TO BE THE MODEL FOR CONNECTED CITIES OF THE FUTURE

SM
RT
COLUMBUS

MISSION STATEMENT

What we want to do now

TO ACCELERATE HUMAN PROGRESS THROUGH OPEN MOBILITY

SMRT COLUMBUS

SMART COLUMBUS

SMART CITY INITIATIVE FOR THE COLUMBUS REGION

NEW URBAN PLAN FOR THE CITY OF THE FUTURE

SUSTAINED ECONOMIC PLATFORM

GRANT PROGRAMS

PROJECT WORK PLAN

THE COLUMBUS WAY

OUR FOUNDATION.
BUILDING BLOCKS FOR OUR FUTURE.

OUR CITY AS LIVING LABORATORY. TEST, LEARN, ITERATE.

OUR NEW WAY OF LIFE.
EMBRACE THE CHANGE.

OUR FOUNDATION.
BUILDING BLOCKS FOR OUR FUTURE.

OPEN DATA OPERATING SYSTEM

The **Smart Columbus Operating System** aims to solve urban mobility and transportation challenges by efficiently matching supply with demand, catering to individual preferences, and ensuring adherence to regulatory guidelines

GRID MODERNIZATION

Modernize the electric grid through utility scale renewables. Improve efficiencies and deploy smart meters. A joint effort of AEP and the city.

CHARGING STATIONS

Install new charging stations on corporate campuses, public streets, and in residential developments, to help make electric vehicles the easy choice for individuals and businesses in Columbus.

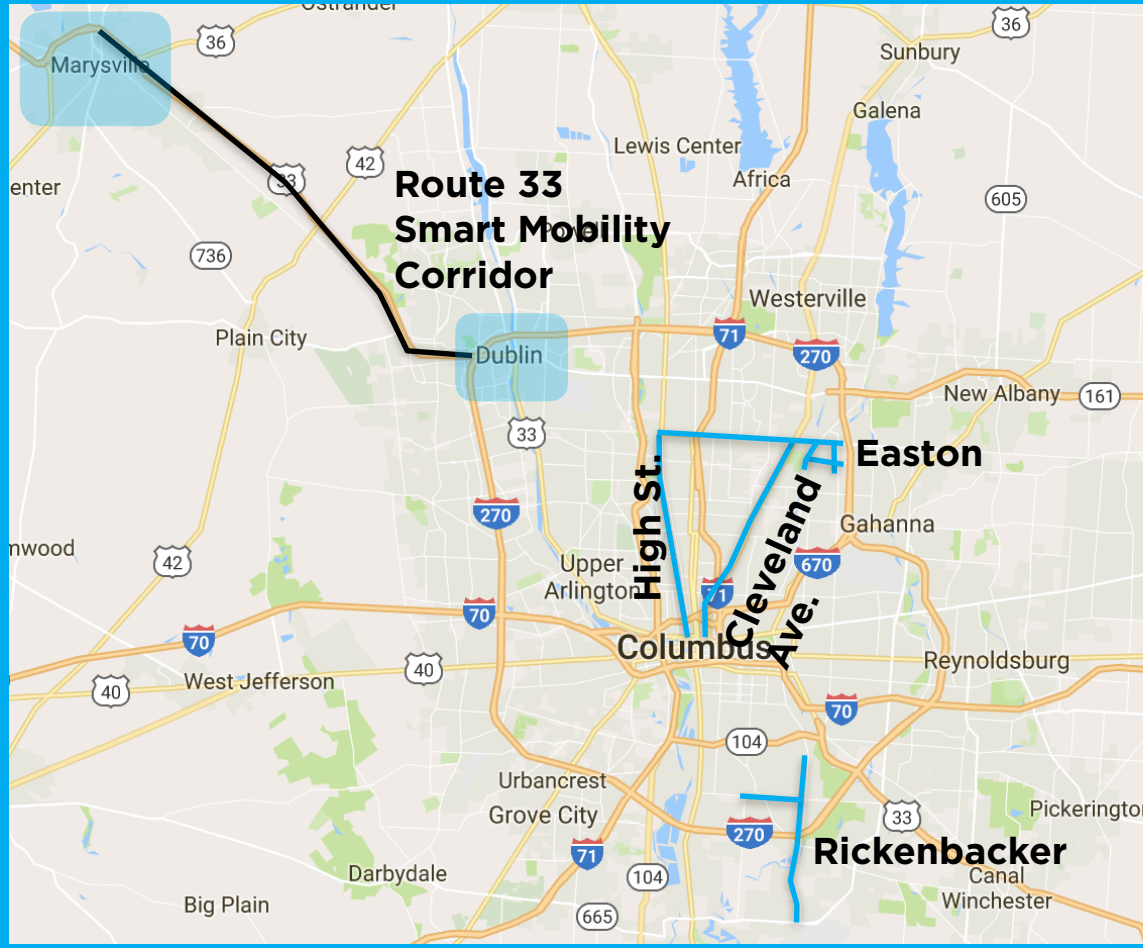
CONNECTED VEHICLE ENVIRONMENT

179 intersections and 4,500 cars, trucks, and buses will be connected in the Columbus Region by 2020.

CONNECTED VEHICLE ENVIRONMENT

Regional CVE Pilots Total

- **179 Intersections**
  - 147 City of Columbus
  - 27 City of Marysville
  - 5 City of Dublin
- **4,500 cars, trucks and buses** connected in the Columbus Region by 2020
  - 3,000 City of Columbus
  - 1,500 Marysville/US 33



OUR CITY AS LIVING LABORATORY.
TEST, LEARN, ITERATE.

AUTONOMOUS VEHICLES

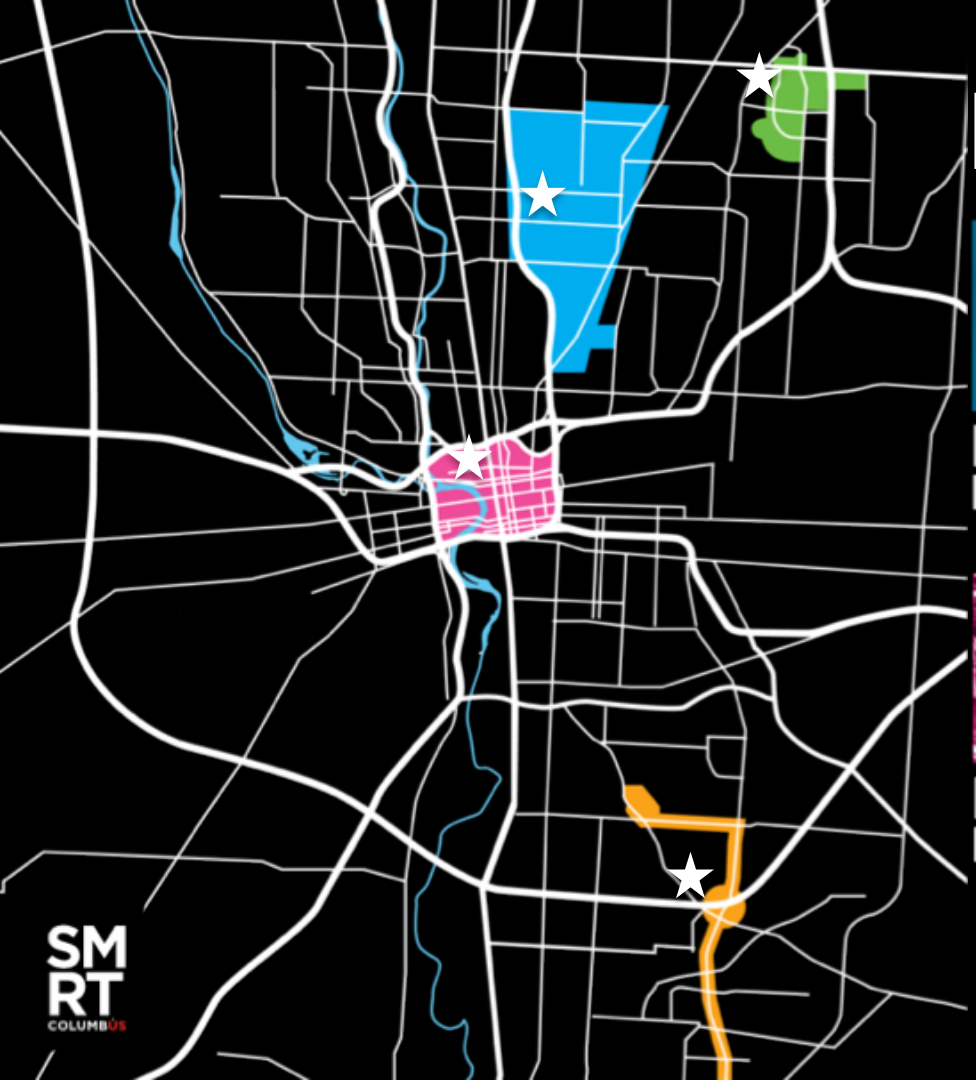
We will be demonstrating connected, autonomous, shared electric shuttles at Easton to help people move within the retail corridor. This will also extend our public transit services, taking people who work there directly to their jobs.

TRUCK PLATOONING

Columbus will demonstrate what the future of logistics could look like by electronically coupling long-haul trucks with sensors.

LADDERS OF OPPORTUNITY

Linden will be the first neighborhood where we will reverse the mistakes of the past by using technology, new mobility services, and smart urban planning to create ladders of opportunity, ensuring all Columbus residents have a place in our future.



DISTRICTS

RESIDENTIAL DISTRICT

COMMERCIAL DISTRICT

DOWNTOWN DISTRICT

LOGISTICS DISTRICT

PILOT AUTONOMOUS VEHICLES

Demonstrate autonomous vehicle technology on Columbus Region roadways. The technology will be proven at the **Transportation Research Center (TRC)** near Marysville, and further tested on campus at **The Ohio State University.** By 2020, our learnings will graduate to our city's streets, with connected, autonomous, shared electric shuttles at **Easton** to help people move within the retail corridor. This will also extend our public transit services, taking people who work there directly to their jobs.

Progress Highlights

- Conducted end user engagement with workforce survey in Easton area
- Exploratory meetings conducted with AV manufacturers
- Ohio State finalizing purchasing agreement with Local Motors for an Olli that will be co-developed in collaboration with the engineering school on campus.

PLATOONING

Fig. 2. A two-truck platoon with wireless communication and radar technology

Progress Highlights

- Route revised
- ODW engaged

X

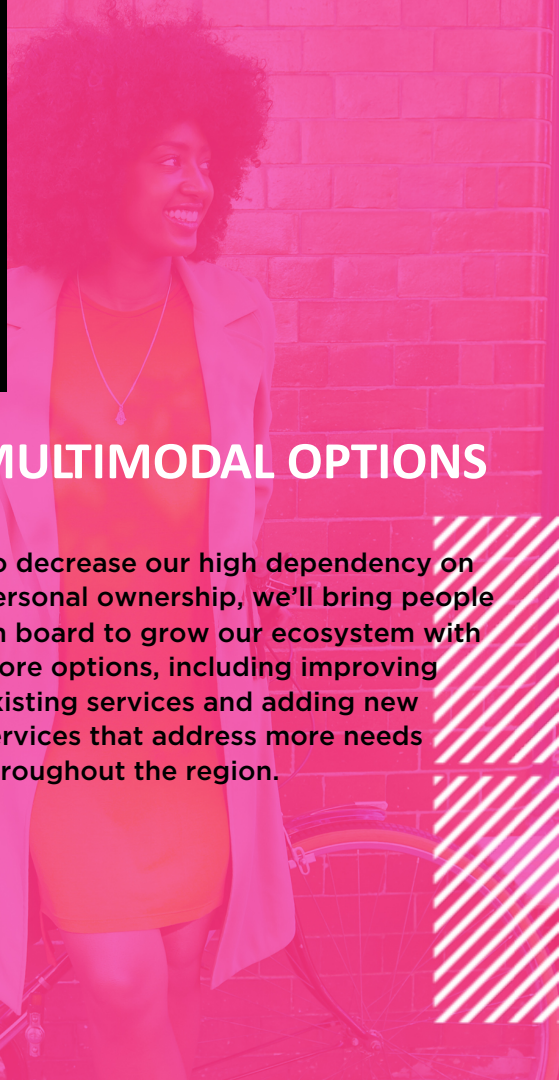
LADDERS OF OPPORTUNITY

- Underpinning theme of our application and projects is that ***Mobility is the great equalizer of the twenty-first century***
- Open, equitable access to transportation can give our residents access to ladders of opportunity; empowering them to better their lives
- Will allow for access to healthcare, school, job training and jobs
- Will help solve for many of the challenges we are facing as the 14th largest city in the US

Progress Highlights

- Weekend Resident Engagement Session in February
- Neighborhood Focus Groups Conducted
- Proposal adapted to reflect feedback from Residents

OUR NEW WAY OF LIFE.
EMBRACE THE CHANGE.



ELECTRIC VEHICLE ADOPTION

We will aggressively grow the electric market in Columbus: add them to public and private fleets, secure a supply of new and used models, prepare dealers and service people, and educate consumers.

INTEGRATED SOLUTIONS & SEAMLESS USER EXPERIENCE

Simple, integrated solutions will create a much friendlier user experience: to navigate, plan routes, and pay fares with different modes of transport, from pick up to parking.

MULTIMODAL OPTIONS

To decrease our high dependency on personal ownership, we'll bring people on board to grow our ecosystem with more options, including improving existing services and adding new services that address more needs throughout the region.

SMRT COLUMBUS

DRIVE ELECTRIC
& DRIVE LESS

SMRT COLUMBUS

X4

Increase in
EV ADOPTION
0.38% of new car sales
to 1.8% by 2020

800 new EVs in FLEET
OPERATIONS Combined
Public and Private

10%

REDUCTION in Single-Occupant Vehicle traffic to Major Employment Centers

SMART COLUMBUS

EARLY ADOPTERS \\ +40 COMPANIES

SMART COLUMBUS ACCELERATION PARTNERS

// FIRST ACTIVATIONS

1

EMPOWERED LEADER

2

BUY ELECTRIC

3

INSTALL CHARGING INFRASTRUCTURE

4

SMART MOBILITY EDUCATION

5

INCENTIVIZE BEHAVIOR CHANGE